

FIG. 1 100

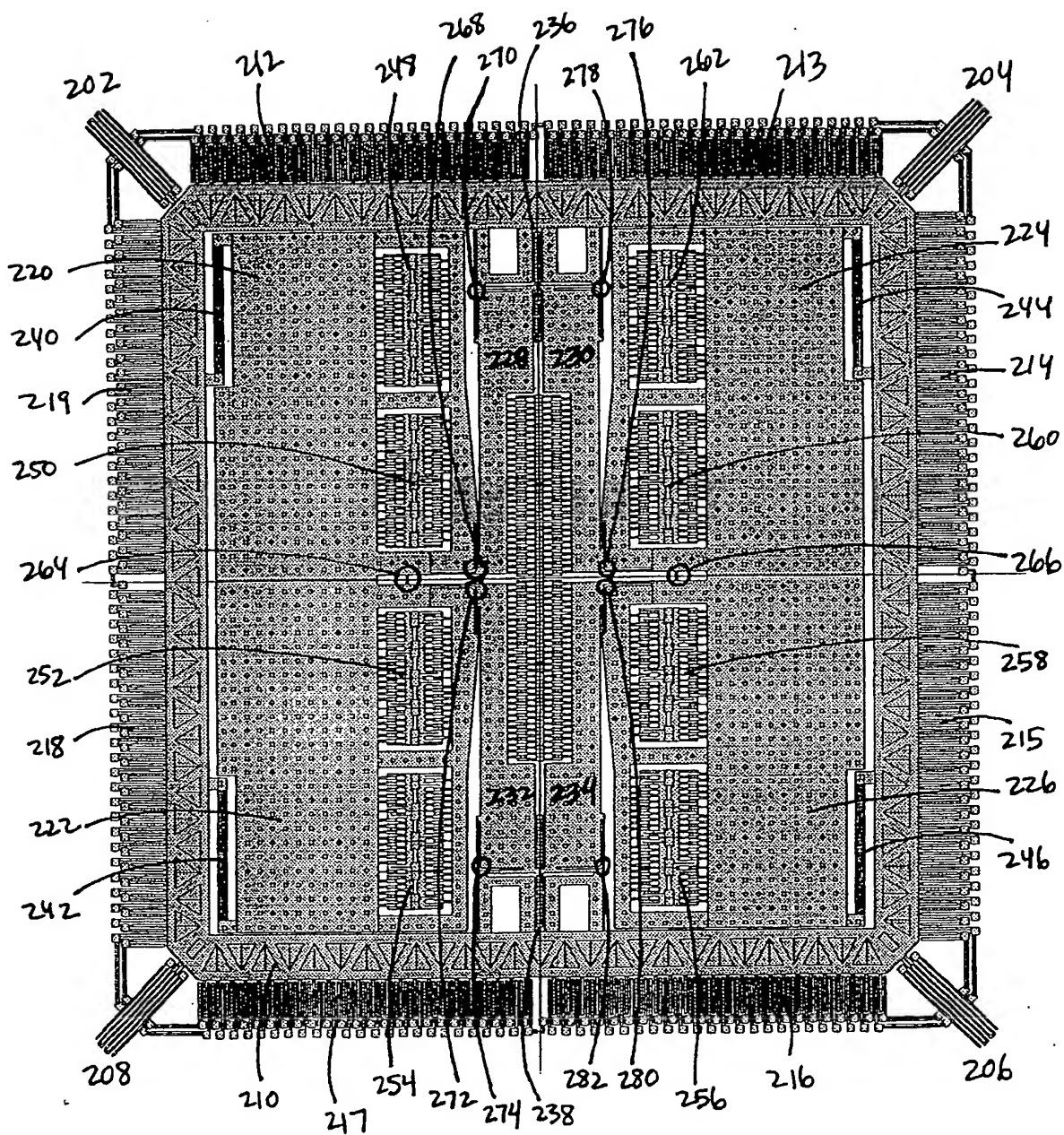
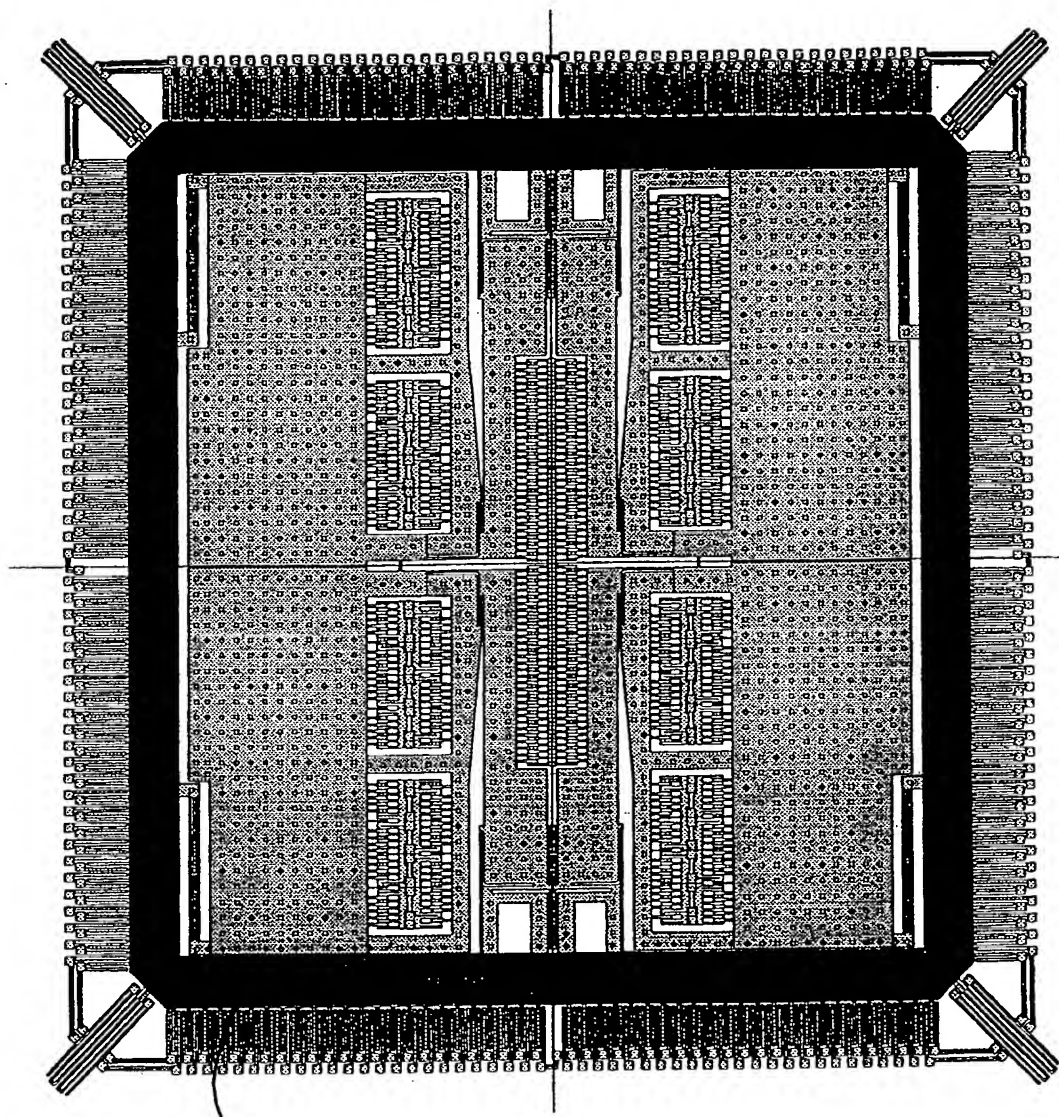


FIG. 2



210

FIG. 3

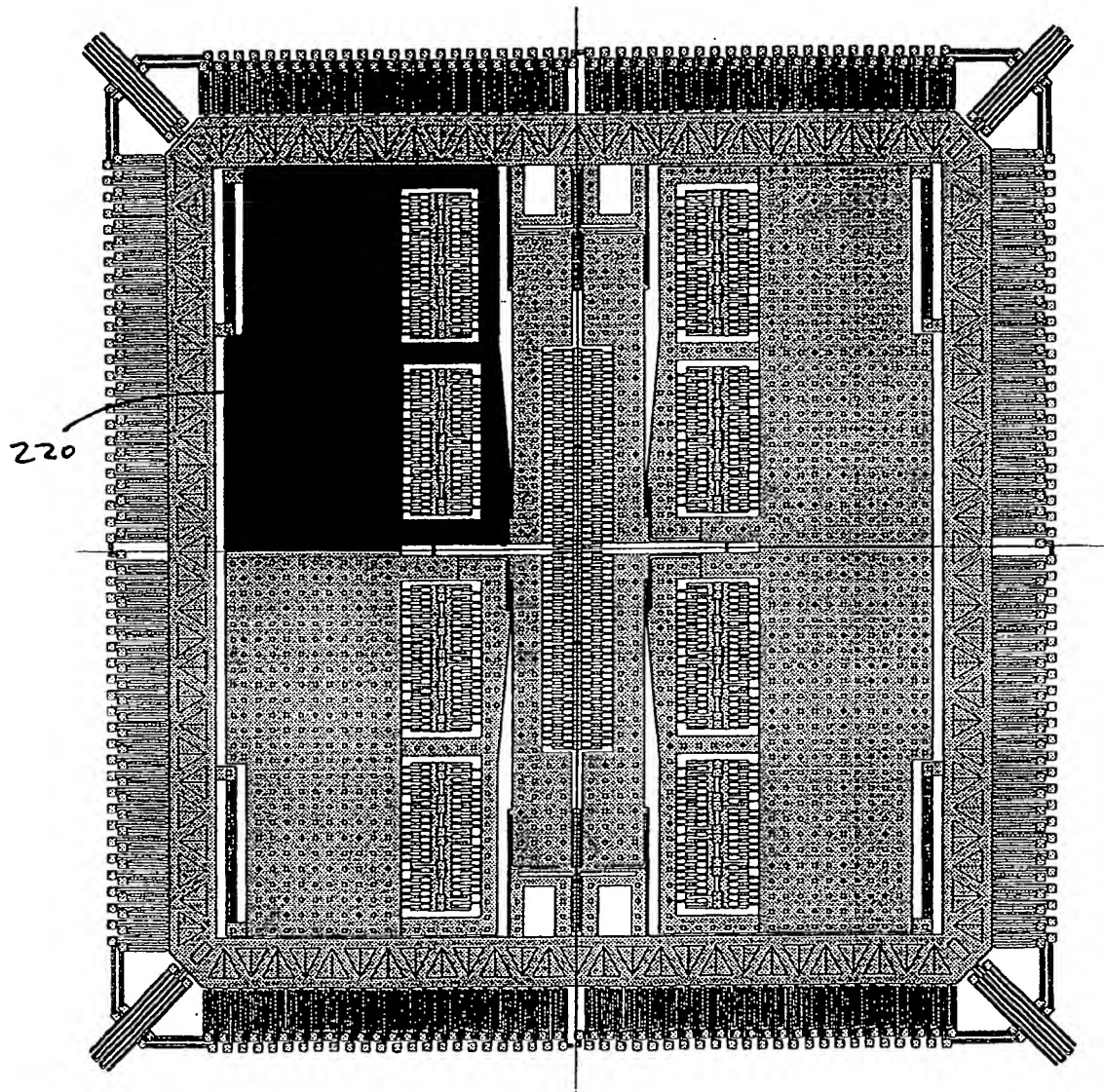


FIG. 4

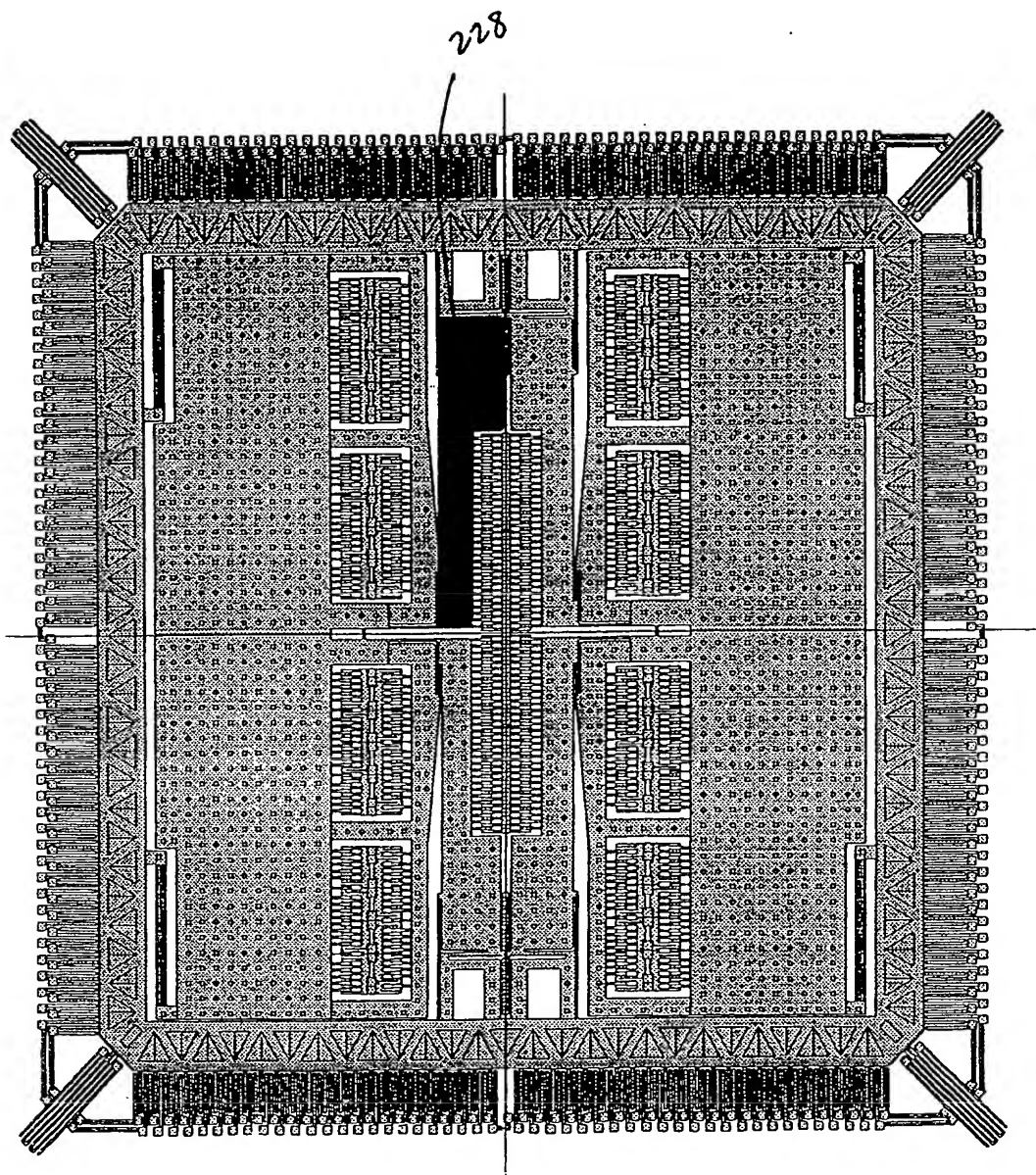


FIG. 5

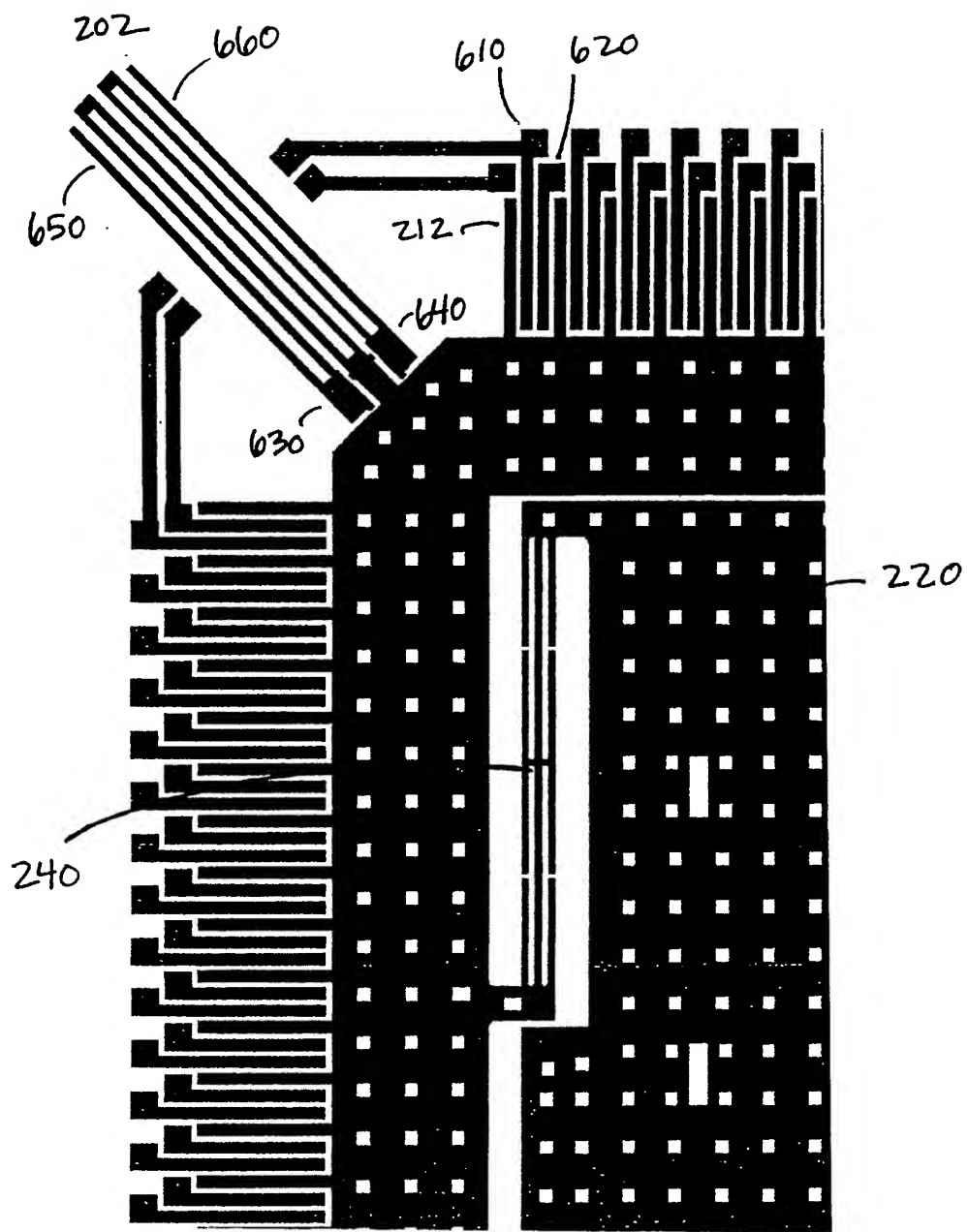


FIG. 6

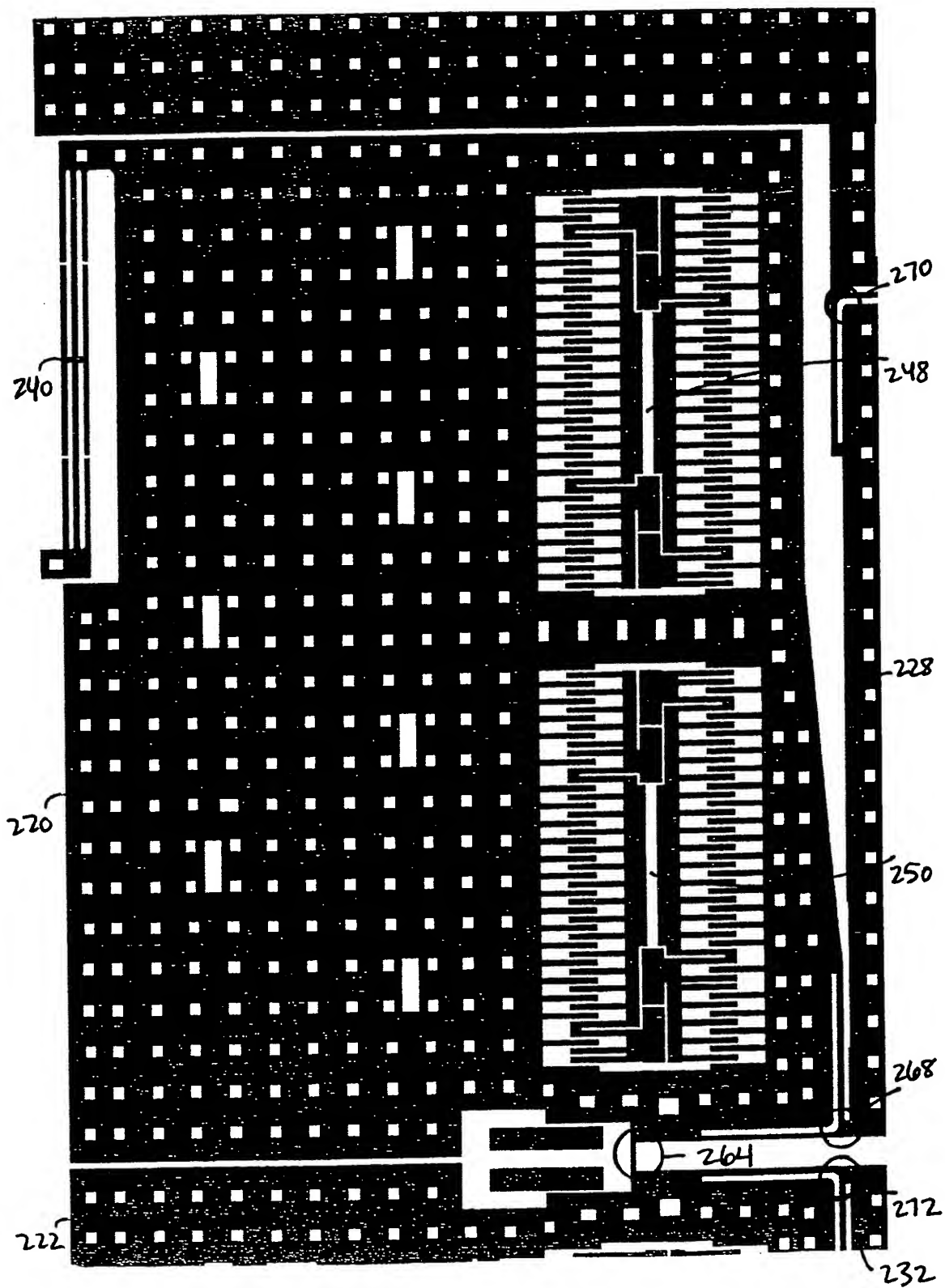


FIG. 7

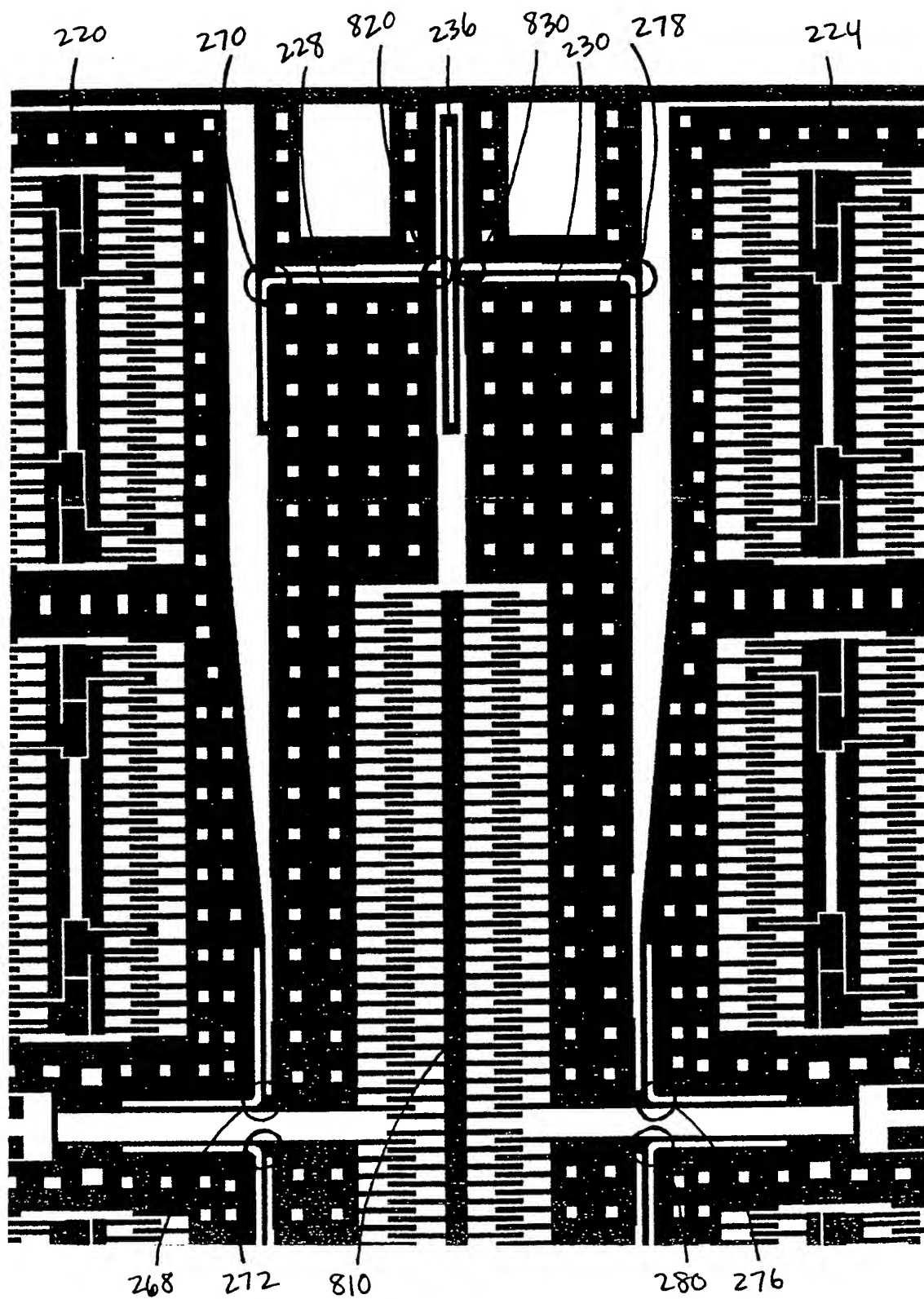


FIG. 8

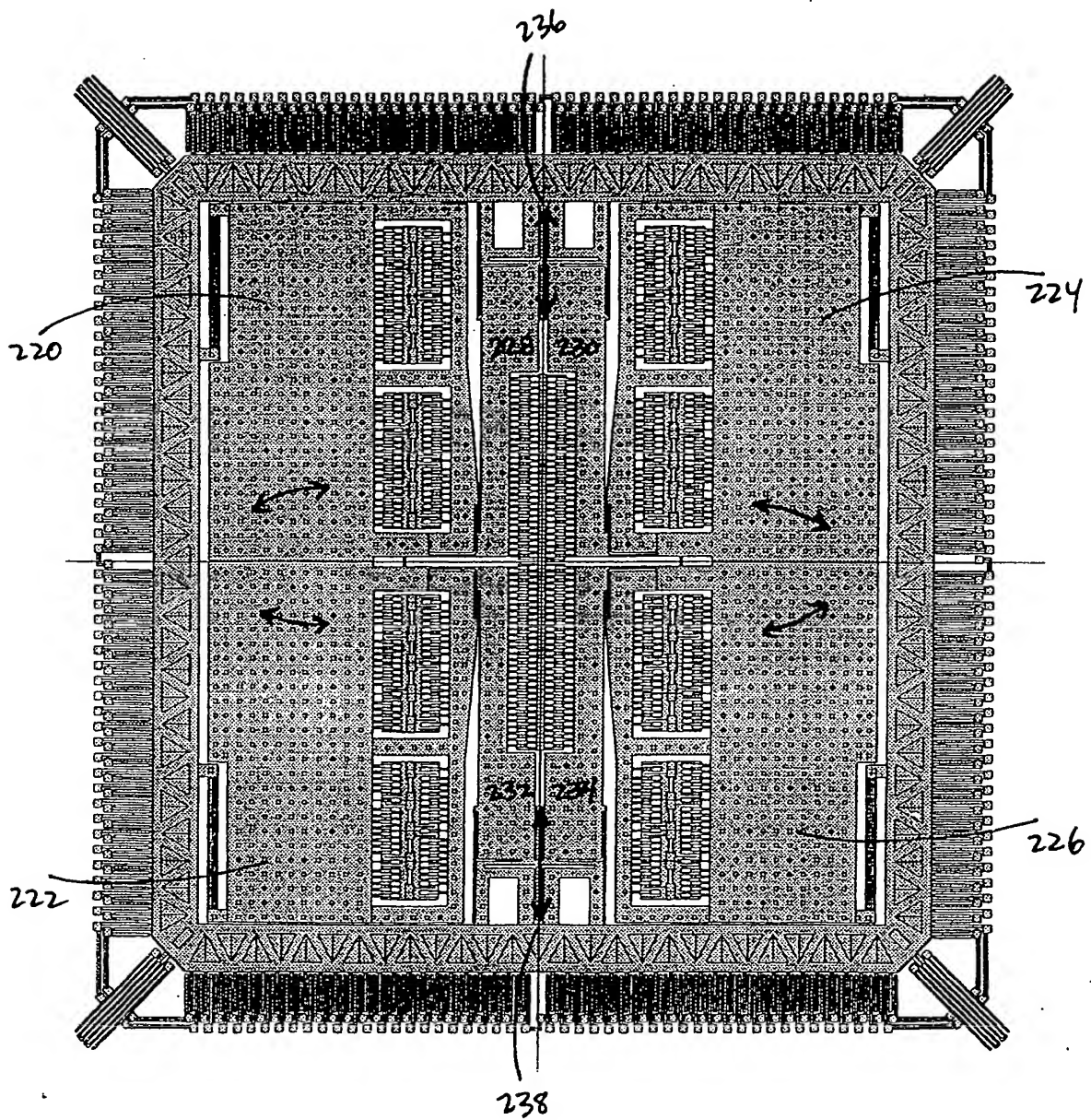


FIG. 9

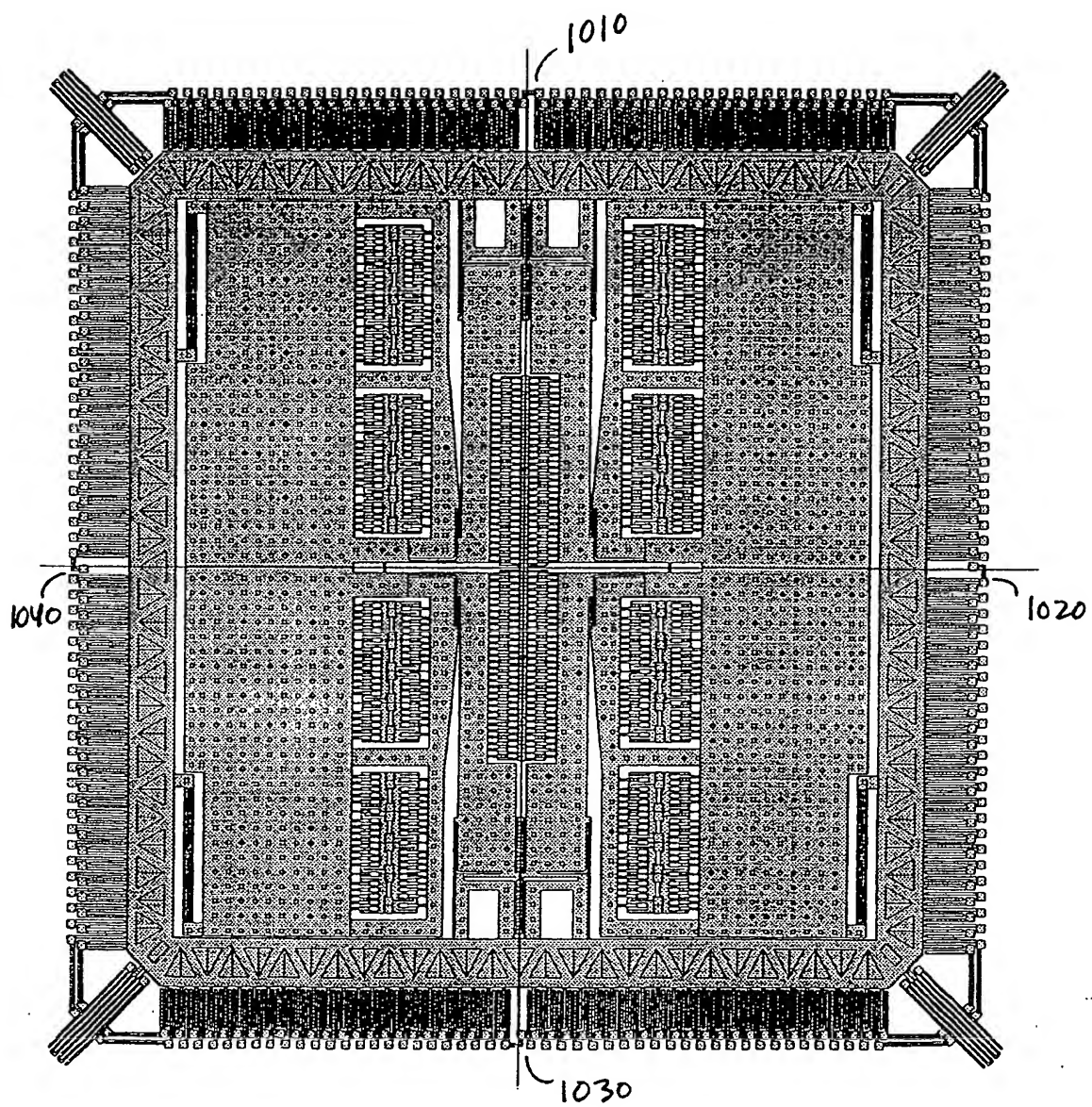


FIG. 10

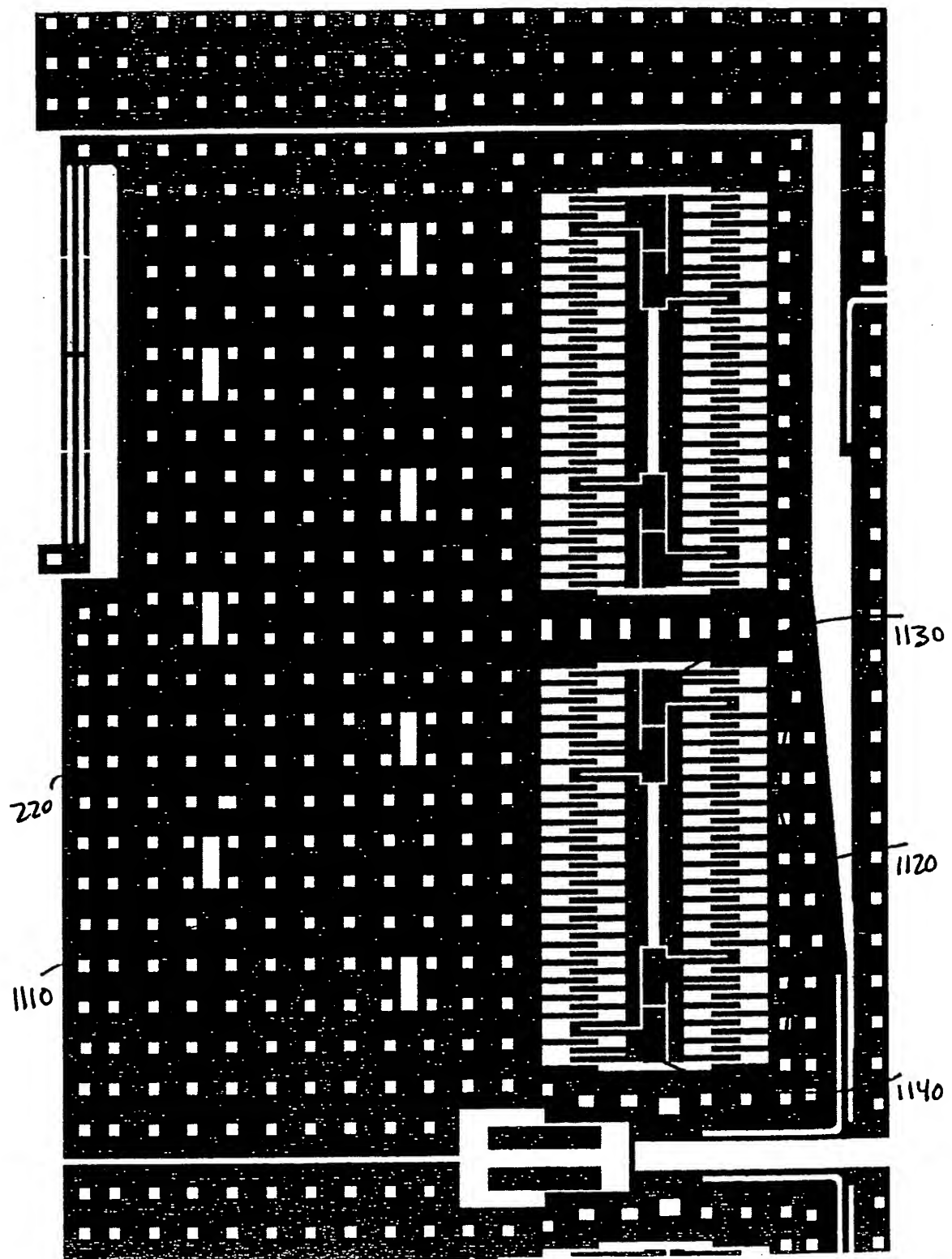
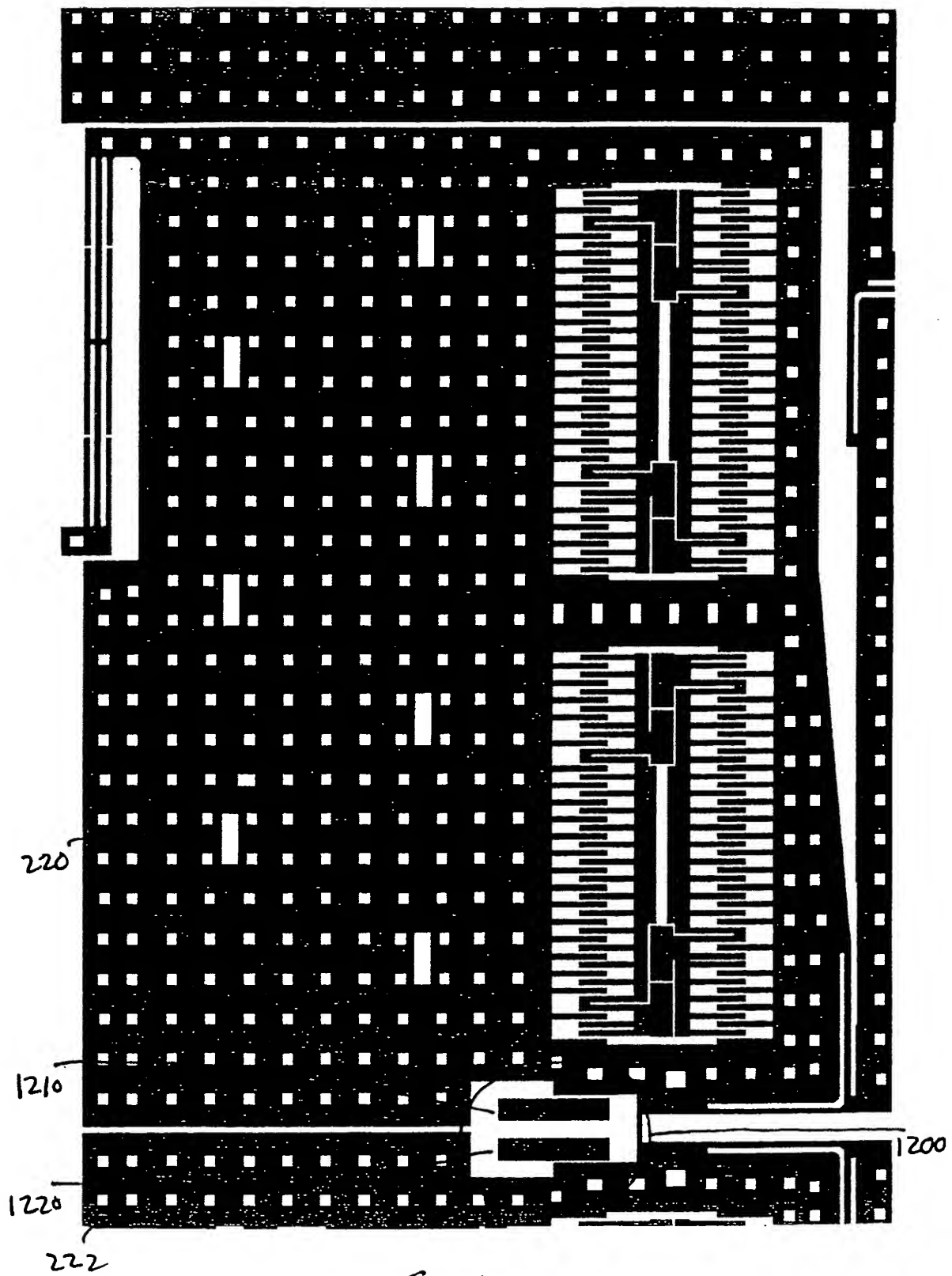


FIG. 11 250



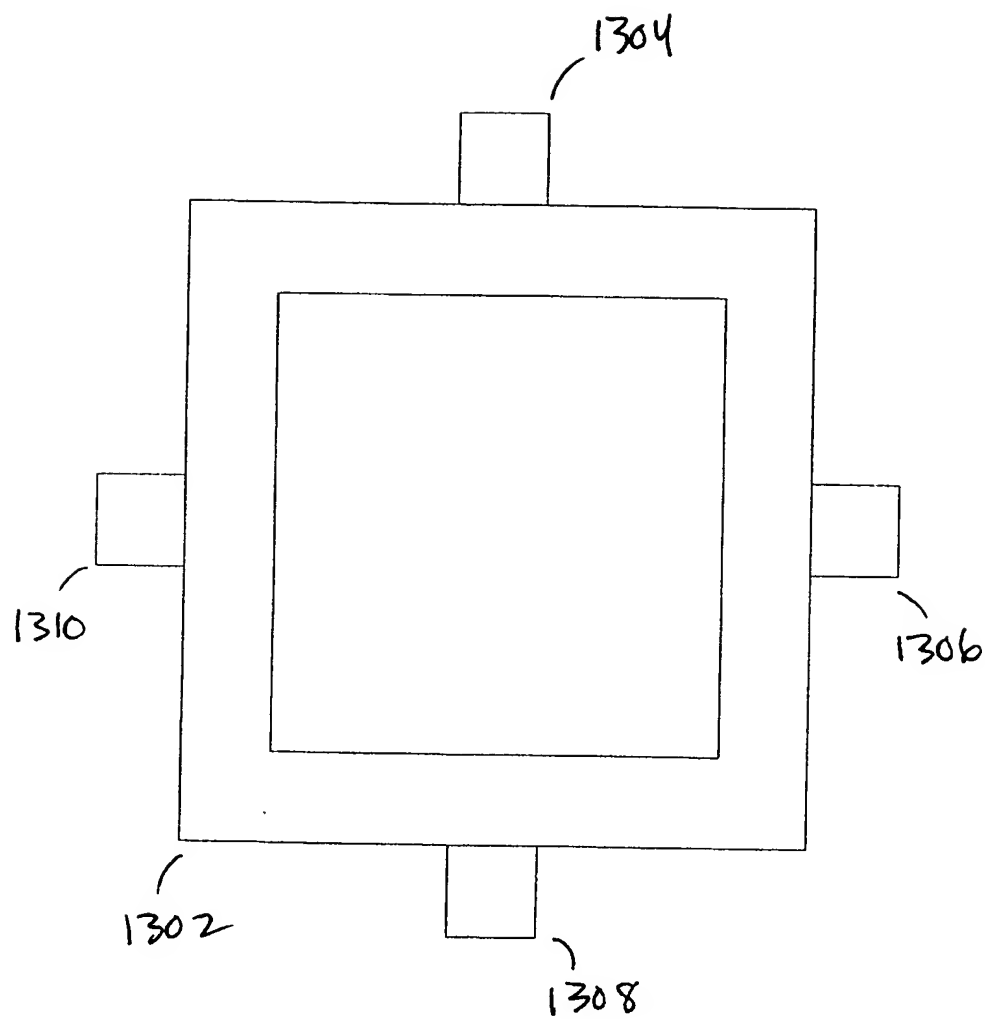


FIG. 13

VELOCITY 2nd HARMONIC DISTORTION

$$cf := \frac{m}{2} - \frac{3}{2} \frac{g}{g}$$

center line of velocity fingers to coupling lever pivot

$$\frac{cf}{\mu m} = 48.3$$

$$Nv := 0, 1, \dots, \frac{v}{8} - 1$$

$$s(Nv) := \frac{cf}{kl - Nv(wf(0) + gv(0)) - 2} \frac{g}{\mu m}$$

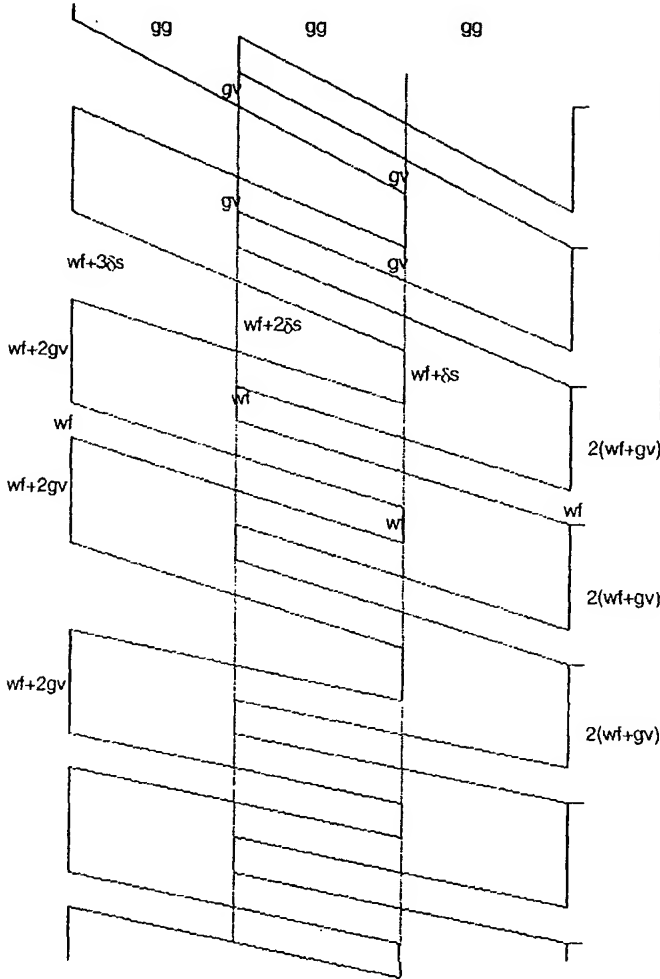
$$s(Nv) =$$

1.7
1.7
1.8
1.8
1.8
1.9
1.9
2
2
2.1
2.1
2.2
2.3
2.4
2.4
2.5

gv>gd to allow perpendicular spacing within gd limit.

s is Y coordinate shift of finger for X of gg rounded to 0.1μm. This allows the vertices of all fingers on grid.

fingers have uniform pitch on the coupling lever and uniform separation on the fixed bus.



$$td(Nv) := (s(Nv) - \text{round}(s(Nv), 1)) \frac{(kl - Nv(wf(0) + gv(0)) - 2)}{cf}$$

tangential displacement error, μm, or effective value...

$$tdc := \sqrt{\sum_{Nv=0}^{\frac{v}{8}-1} \frac{8 td(Nv)^2}{v}} \quad tdc = 0.12$$

FIG. 14

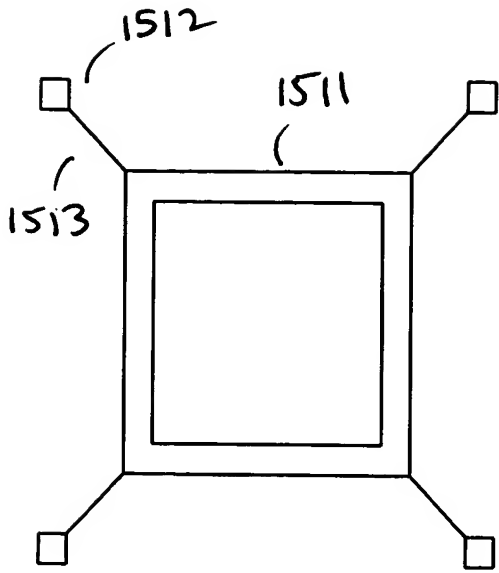


FIG. 15A

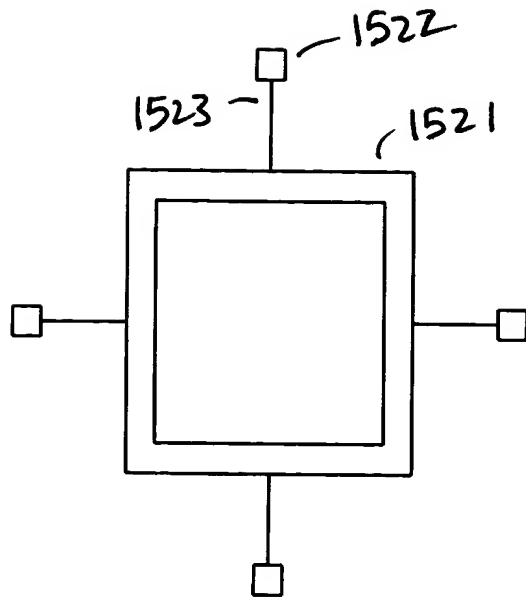


FIG. 15B

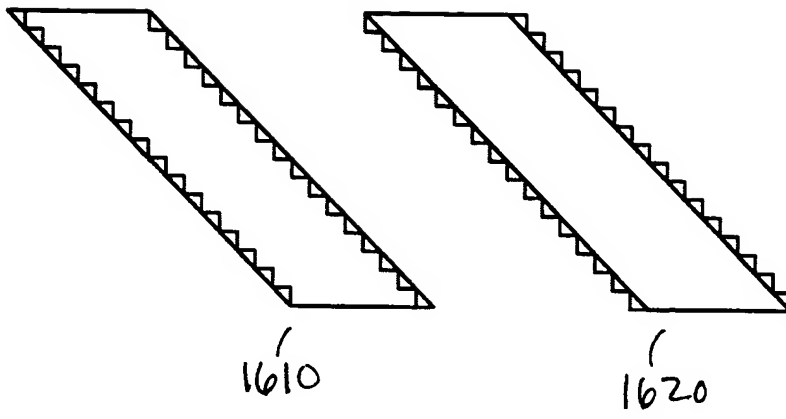


FIG. 16

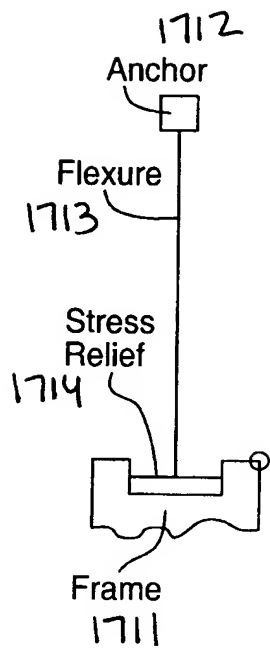
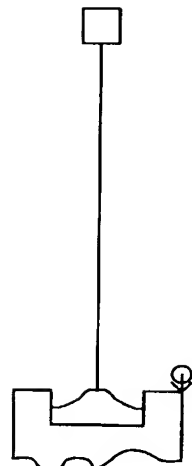
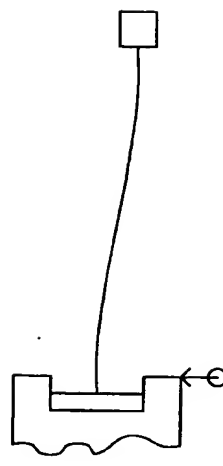


FIG. 17A



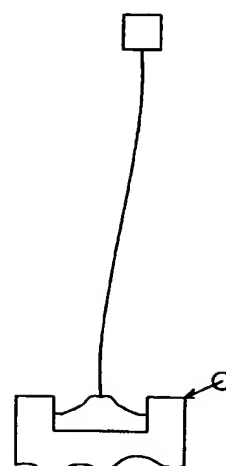
Shrinkage

FIG. 17B



Rotation

FIG. 17C



Translation

FIG. 17D

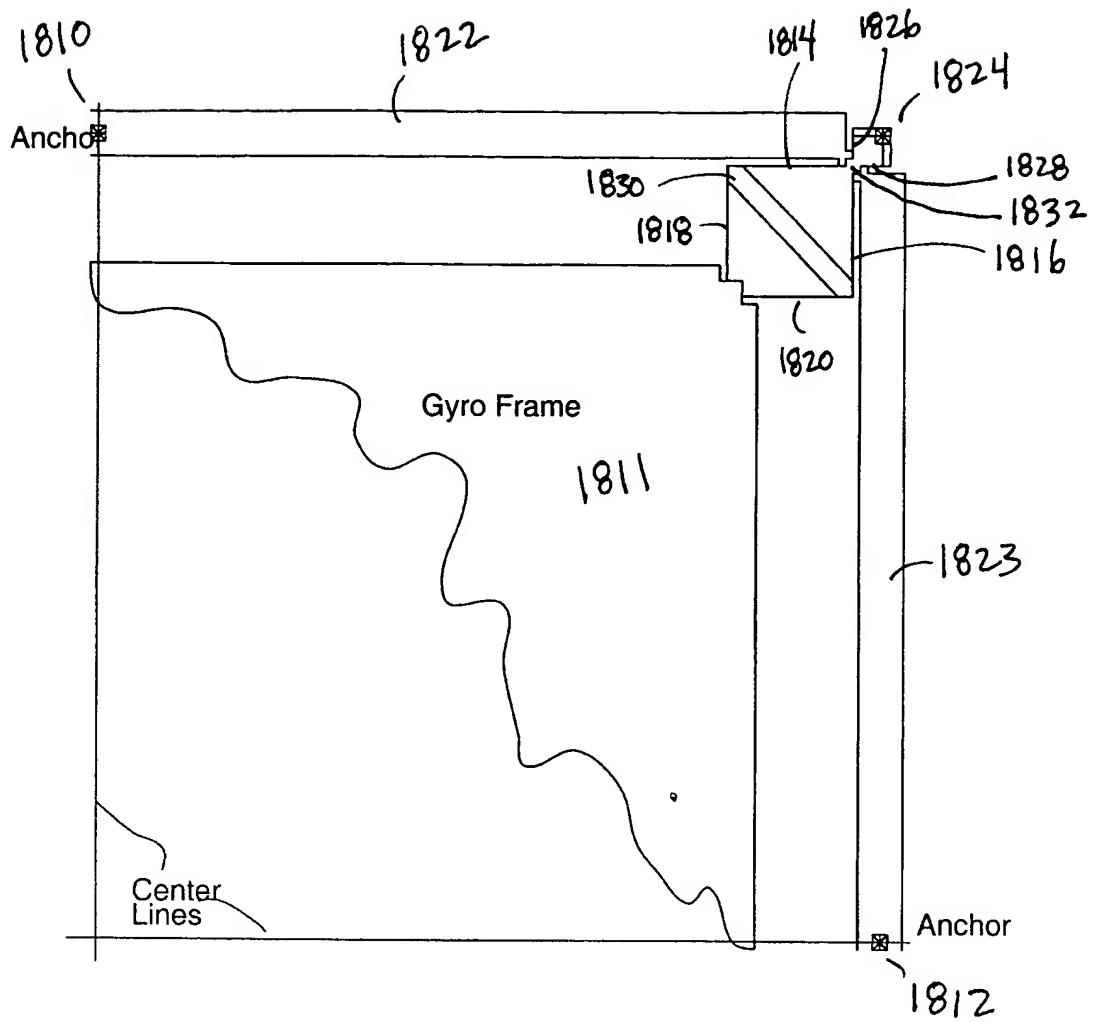
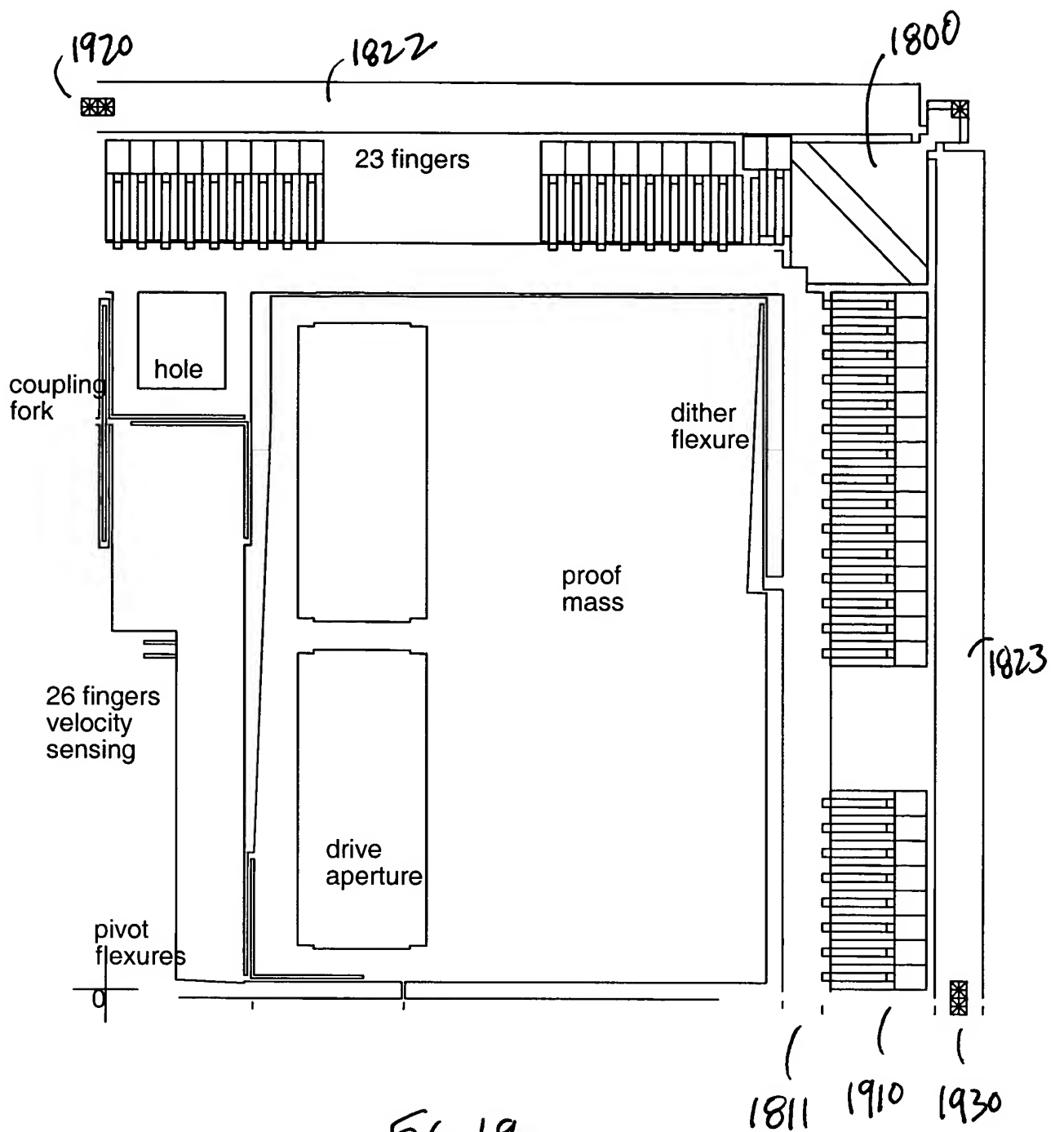
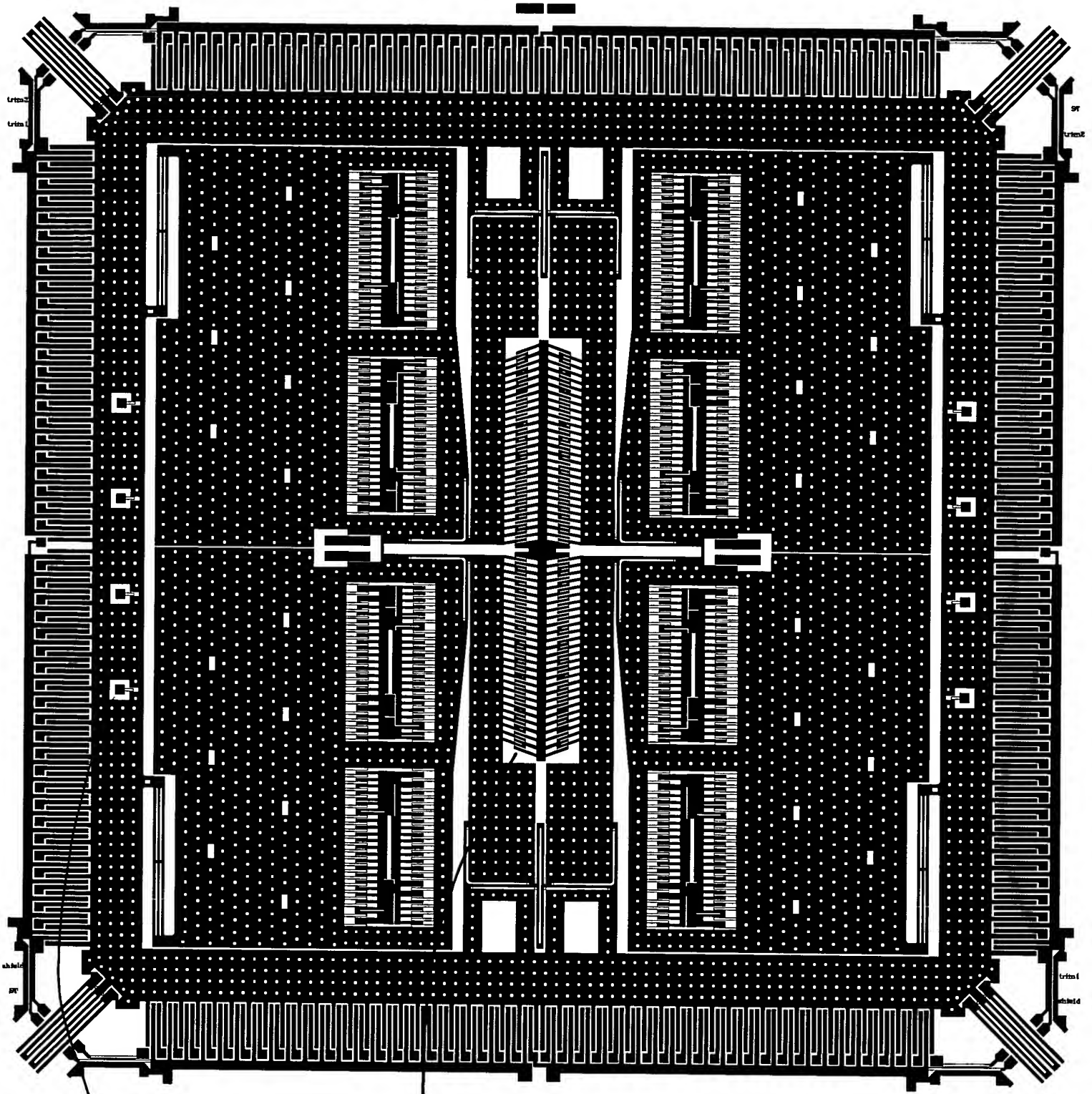


FIG. 18 1800





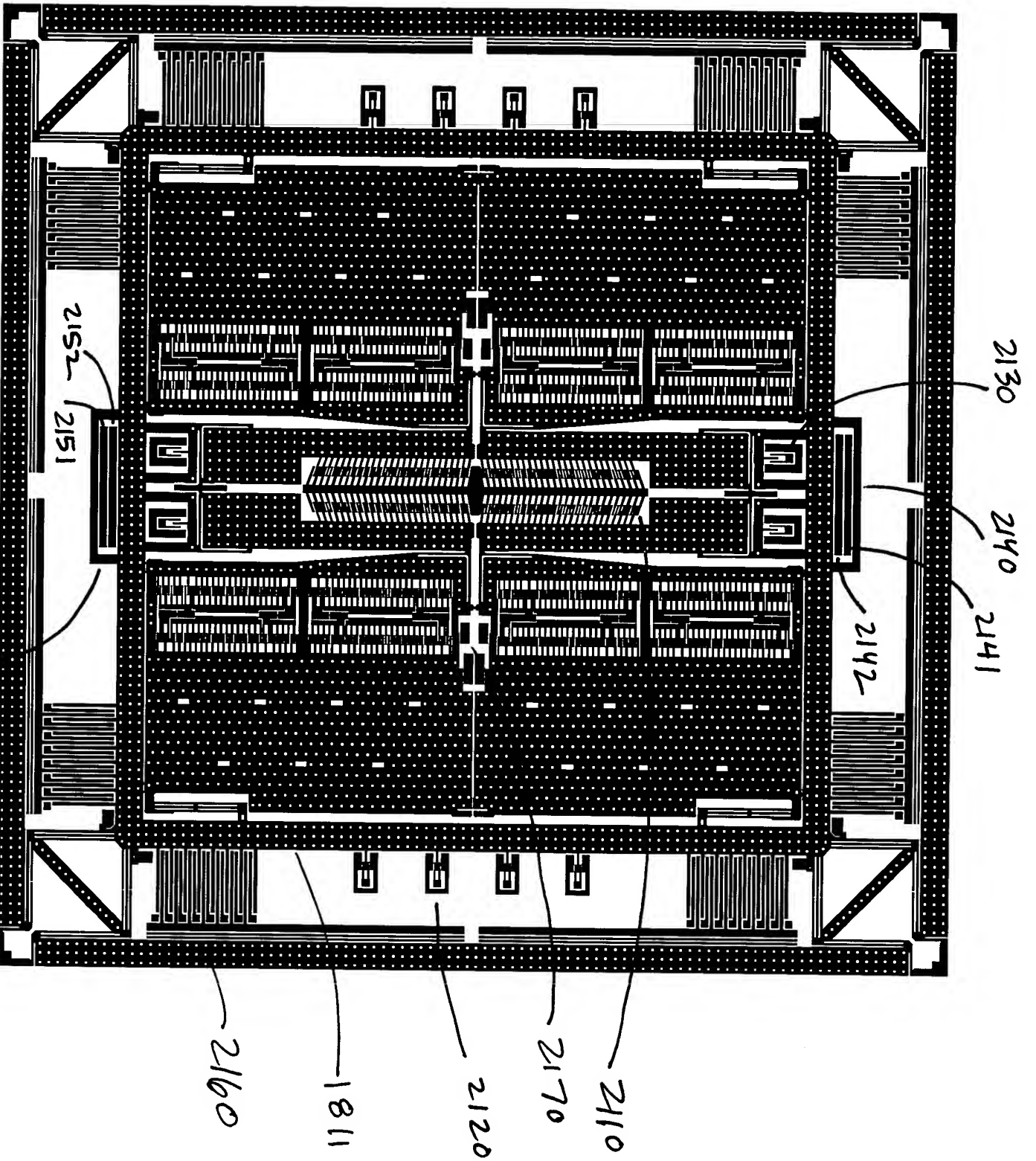


Fig. 21

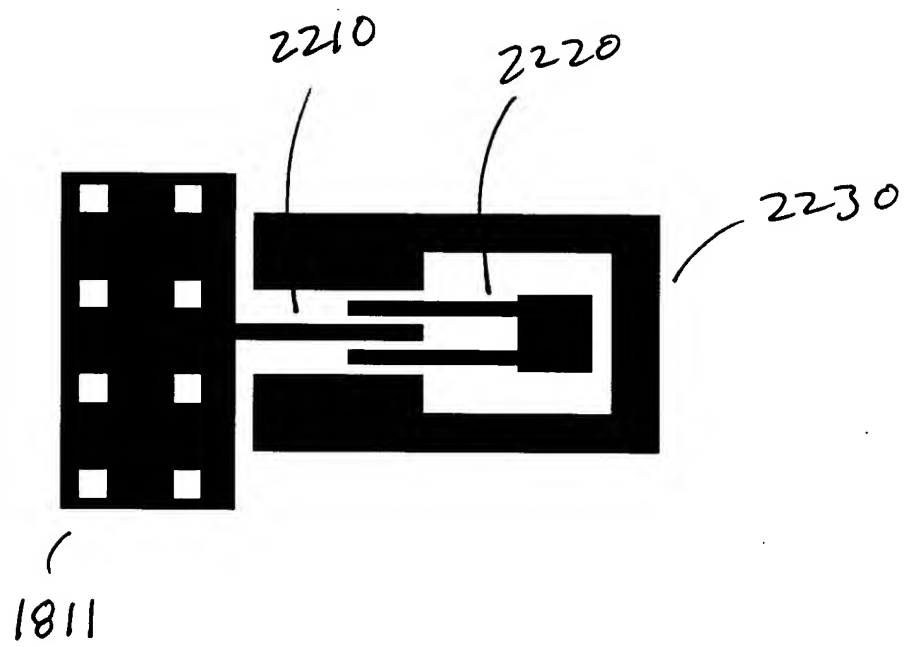


FIG. 22